Supplementary material- Informal user study

Method

The informal user study can be split up into three sections; introduction, task 1, and task 2. During the test, the subjects could ask for information about what tools did but not how to employ them.

Introduction

The test subjects were given introductions to the gradient mesh tool in Adobe Illustrator and our tool. Estimated time usage: 15 minutes.

Task 1

The test subjects were asked to create something of similarity to Figure 1. First in Adobe illustrator, then in our tool. Estimated total time usage: 10 minutes.
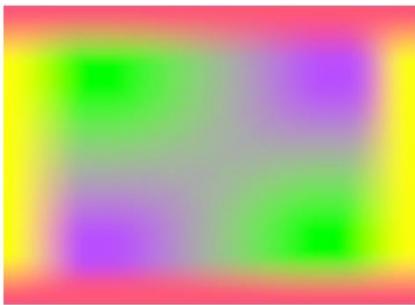

Figure 1

Task 2

The test subjects were asked to create something of similarity to Figure 2 and Figure 3. First in our tool, then in Adobe Illustrator.
Estimated total time usage: 35 minutes.
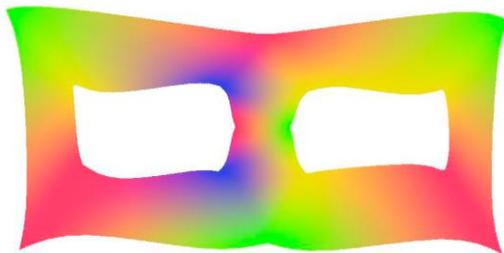
Figure 3
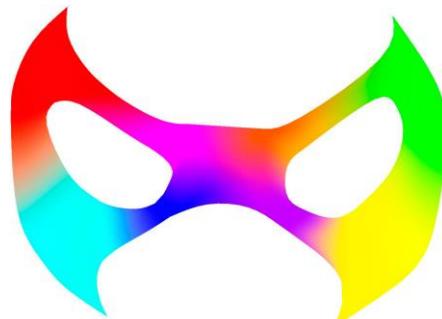
Figure 2

Test results

Subject 1

	Adobe Illustrator	Our application
Task 1		
Task 2		

Link to video: https://www.youtube.com/watch?v=vOhbrXaXXUY
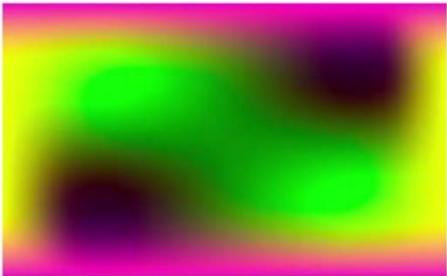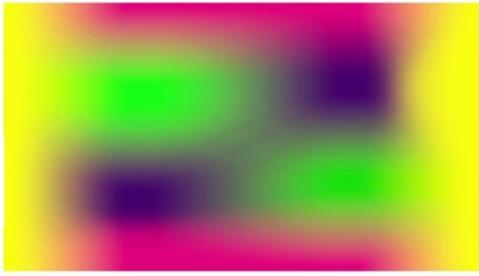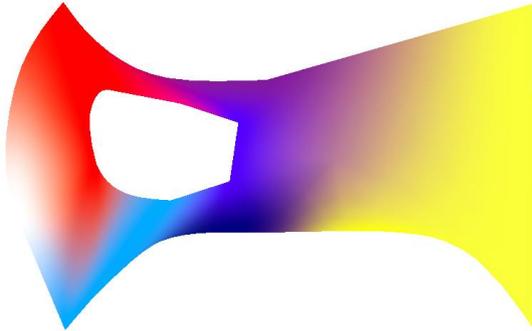
Comments: Test subject gave up during task 2 due to time usage (had other appointments).

Subject 2

|	Adobe Illustrator	Our application
Task 1		
Task 2		

Link to video: https://www.youtube.com/watch?v=7XT3ZmX4LIY
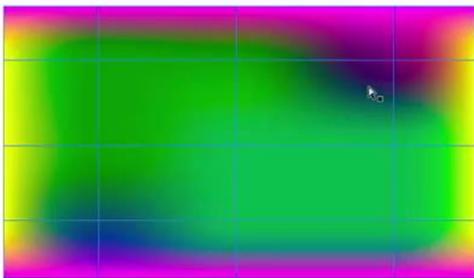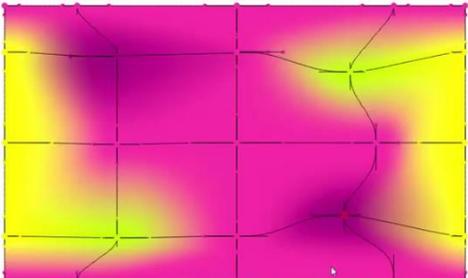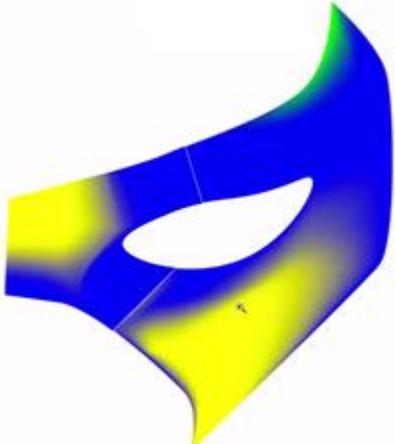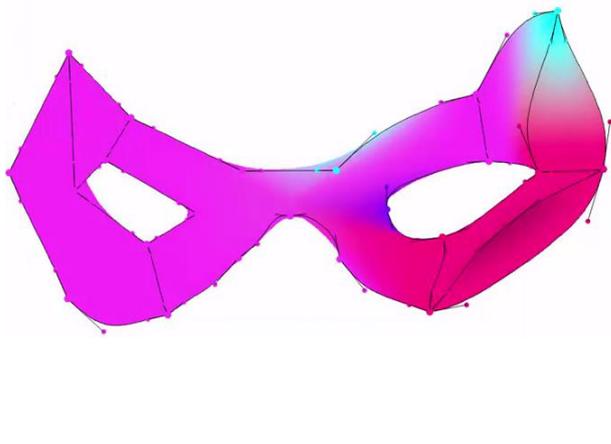
Comments: Test subject seemed eager to finish.

Subject 3

	Adobe Illustrator	Our application
Task 1		
Task 2		

Link to video: https://www.youtube.com/watch?v=SHxxf5DgsiI
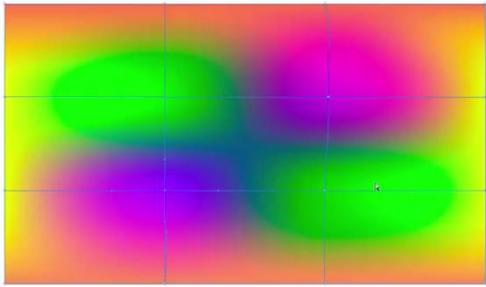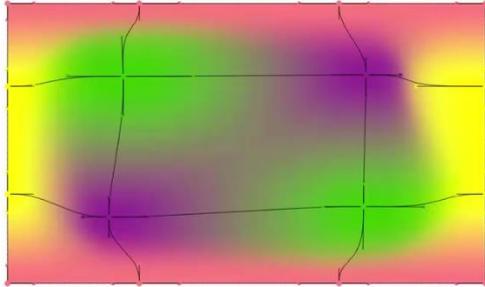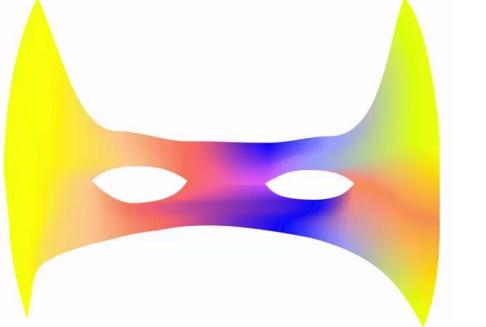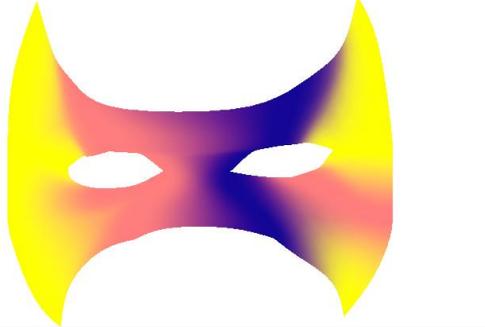
Comments: Time consumption for task 2 was approximately 20 minutes in Adobe Illustrator, against 8 minutes in our application.

Subject 4

	Adobe Illustrator	Our application
Task 1		
Task 2		

Link to video: https://www.youtube.com/watch?v=C3h2Q7Sq4Jg
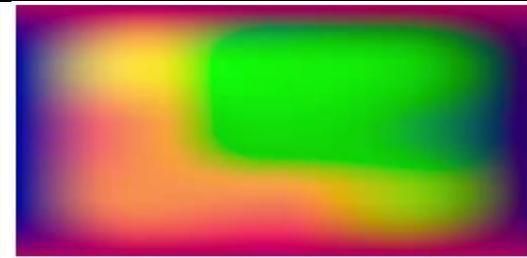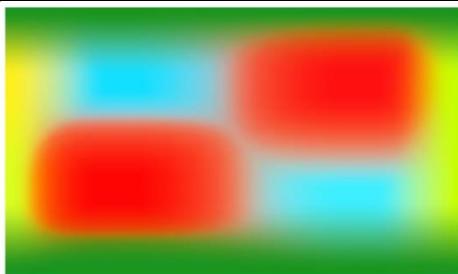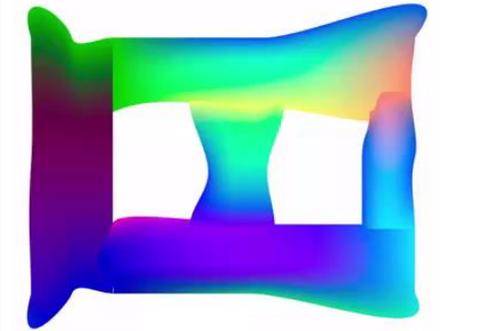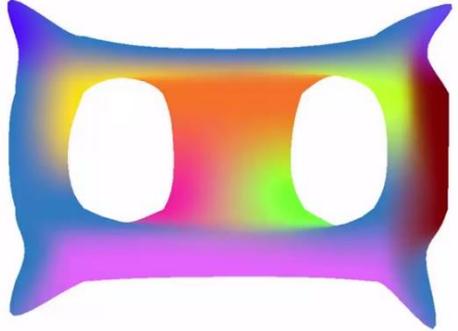
Comments: Test subject seemed irritated by doing task 2 in Illustrator, and therefore gave up.

Subject 5

	Adobe Illustrator	Our application
Task 1		
Task 2		

Link to video: https://www.youtube.com/watch?v=XrdkVGygeiE
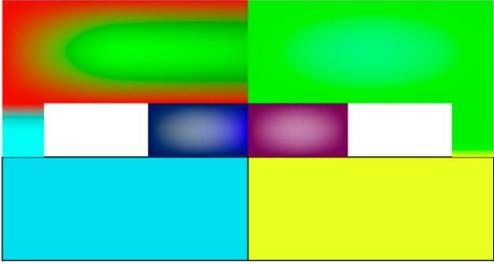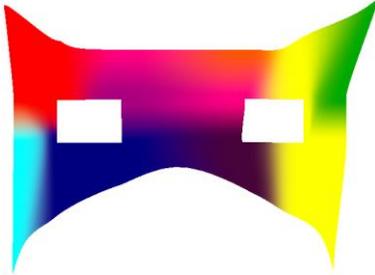
Comments: Adobe Illustrator crashed multiple times during the second task. The test was therefore finished before the test subject was pleased with the result.

Additional user survey

After the user study an anonymous user survey was sent to the test subjects. The data suggest that Adobe Illustrator either provides a generally better user interface (with better support for operations like undo), or that it was easier to work with Illustrator over our tool since the users already were familiar with Illustrator. For the non-regular mesh, users preferred our tool over Illustrator's. Two test subjects said they would probably use the gradient meshes more if our approach was available in Adobe Illustrator.

"[…] I enjoyed the experience from the tested tool more than Illustrator when it came to the tasks given. Both were difficult for a beginner, but at least the tested tool made more sense: especially with deleting faces to create holes."
– Test subject